

# S-8016.C3

TYPE : Basic

AWS A5.5 / ASME SFA5.5 E8016-C3  
JIS Z3211 E5516-N2  
EN ISO 2560-A - E46 4 1Ni B 1 2

SWAW

## Applications

S-8016.C3 can be used for welding of high tensile steel and 1% Ni steel used in machinery, pressure vessels, storage tanks for low temperature.

## Characteristics on Usage

- S-8016.C3 is a low hydrogen type electrode for all position welding.
- Good notch toughness of all-weld metal at low temperature.
- X-ray performance and usability are good.

## Notes on Usage

- ① Dry the electrodes at 350~400°C(662~752°F) for 60 minutes before use.
- ② Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose to prevent blowhole at the arc starting.
- ③ Pay attention not to exceed proper heat-input because excessive heat-input causes deterioration of impact values of all weld metal.

## Welding Position

## Current



1G 2F 3G 4G  
(PA) (PB) (PF) (PE)

AC or DC +

## Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.06	0.54	1.12	0.015	0.006	0.96

## Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
540 (78,400)	620 (90,000)	26.0	-40 (-40)	80 (59)

## Approval

## I Packing

Packet 5 kg (11 lbs)  
Carton 5 kg (11 lbs) × 4 : 20kg(44 lbs)

## Sizes Available and Recommended Currents (Amp.)

Size mm (in)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)	6.0 (15/64)
Length mm(in)	350 (14)	350 (14)	400 (16)	400 (16)	450 (18)
F	55~90	90~130	130~190	190~240	250~300
V-up, OH	50~80	80~120	120~170	-	-